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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR        | ATTORNEY DOCKET NO.          | CONFIRMATION NO. |
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| 10/767,446  | 01/29/2004  | Deborah Lewandowski Barclay | LUC-455/Barclay<br>7-52-6-7- | 6451             |
| 47382   | 7590        | 10/05/2005                  | EXAMINER<br>HUYNH, CHUCK     |                  |
| PATTI & BRILL, LLC<br>ONE NORTH LASALLE STREET<br>44TH FLOOR<br>CHICAGO, IL 60602 |             |                             | ART UNIT<br>2683             | PAPER NUMBER     |

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/767,446

Applicant(s)

BARCLAY ET AL.

Examiner

Chuck Huynh

Art Unit

2683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 20 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 20 reads: An article, comprising:

one or more computer-readable signal-bearing media ; and

means in the one or more media for performing a barge-in to allow a first user to participate in a preexisting active call with a second user of a mobile communication device.

The claim for "means in the media" is in improper form for claiming computer executable codes; as such the claim is directed merely to a computer program, which is non-statutory.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 6-10, 12-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harrison in view of Vishwanathan et al. (hereinafter Vishwanathan).

Regarding claim 1, Harrison discloses an apparatus, comprising:

a switching component that performs a barge-in that allows a first user to communicate with a second user of a mobile communication device that is engaged in a pre-existing active call (Col 5, lines 48-59; Figs. 1 and 2).

Harrison discloses all the particulars of the claim except for a mobile switching component.

However, Vishwanathan does disclose a mobile switching component (MSC) within an analogous art (Fig. 1, 2).

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate Vishwanathan's disclosure to expand the system to a mobile network and provide communication for mobile users.

Regarding claims 2, Harrison discloses the apparatus of claim 1, wherein the mobile switching component communicates one or more indications (waiting tones) of the barge-in to the second user of the mobile communication device (Col 5, lines 48-59).

Regarding claim 3, Harrison discloses the apparatus of claim 2, wherein the one or more indications comprise one or more in-band indications of the barge-in, wherein the mobile switching component cooperates with the mobile communication device to communicate the one or more in-band indications (voice channel or audio waiting tone) of the barge-in to the second user of the mobile communication device (Col 8, lines 1-6).

Regarding claim 4, Harrison discloses the apparatus of claim 2, wherein the one or more indications comprise one or more out-of-band indications of the barge-in, wherein the mobile switching component cooperates with the mobile communication device to communicate the one or more out-of- band indications (data channel/messages) of the barge-in to the second user of the mobile communication device (Col 11, lines 24-36).

Regarding claim 6, Harrison discloses the apparatus of claim 1, wherein the preexisting active call comprises a preexisting active call between the mobile communication device and one or more additional communication devices (Col 5, lines 48-59);

wherein the mobile switching component performs the barge-in to allow the first user to participate in the preexisting active call between the mobile communication

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device and the one or more additional communication devices (conference call) (Col 8, lines 1-6).

Regarding claim 7, Harrison discloses the apparatus of claim 6, wherein the mobile switching component communicates one or more indications of the barge-in to the one or more additional communication devices (Col 8, lines 1-6).

Regarding claim 8, Harrison discloses the apparatus of claim 6, wherein the mobile switching component communicates one or more indications of the barge-in to the mobile communication device and the one or more additional communication devices (Col 8, lines 1-6).

Regarding claims 9, Harrison discloses the apparatus of claim 6, wherein the mobile switching component places one or more of the one or more additional communication devices on hold for a duration of the barge-in (Col 6, lines 36-37; Col 8, lines 9-12).

Regarding claim 10, Harrison discloses the apparatus of claim 1, wherein the mobile switching component receives an authorization code from the first user;

wherein the mobile switching component employs the authorization code from the first user to perform the barge-in (Col 7, lines 34 – Col 8, lines 1-12).

Regarding claim 12, Harrison discloses the apparatus of claim 1, wherein the mobile switching component employs one or more priority user designations from the second user to perform a determination that the first user is a priority user (this is done with a password) (if the caller knows the password, then the caller is of priority) (Col 7, lines 56-67);

wherein upon the determination that the first user is a priority user, the mobile switching component performs the barge-in to allow the priority user to communicate with the second user (Col 7, lines 56 – Col 8, lines 1-6).

Regarding claim 13, Harrison discloses the apparatus of claim 1, wherein the mobile switching component receives a request to perform the barge-in from an operator that acts on behalf of the first user (Col 1, lines 6-35);

wherein the mobile switching component employs the request to perform the barge-in to allow the first user to communicate with the second user (Col 7, lines 65 – Col 8, lines 1-6).

Regarding claim 14, Vishwanathan discloses the apparatus of claim 1, wherein the mobile switching component (Fig. 1) comprises:

a home mobile switching center for the mobile communication device, wherein the home mobile switching center receives a request for the barge-in (Page 1, [0005]; Page 6, [0071]), the apparatus further comprising:

a visited mobile switching center for the mobile communication device (Page 1, [0005]);

wherein the home mobile switching center identifies the visited mobile switching center through employment of the home location register (Fig. 1);

wherein the home mobile switching center and the visited mobile switching center cooperate to perform the barge-in to allow the first user to participate in the preexisting active call with the second user of the mobile communication device (Page 6, [0071]).

Regarding claim 15, Harrison discloses a method, comprising the step of:  
performing a barge-in that allows a first user to communicate with a second user that is engaged in a preexisting active call (Col 5, lines 47-59).

Harrison discloses all the particulars of the claim except the second user being a mobile device.

However, Vishwanathan disclose a wireless network with mobile stations using a barge-in function for communication (Page 6, [0071]; Fig. 1).

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate Vishwanathan's disclosure to expand the system to a mobile network and provide communication for mobile users.



Regarding claim 16, Harrison discloses the method of claim 15, wherein the step of performing the barge-in that allows the first user to communicate with the second user of the mobile communication device that is engaged in the preexisting active call comprises the steps of:

determining that the first user is a priority user (if the caller knows the password, then the caller is of priority) (Col 7, lines 56-67); and

bridging a call leg of the priority user with a call leg of the second user (Abstract; Col 6, lines 51-60).

Regarding claim 17, Harrison discloses the method of claim 16, further comprising the step of:

wherein the step of bridging the call leg of the priority user with the call leg of the second user (Col 6, lines 51-60) comprises the step of:

cooperating with a switch to bridge the call leg of the priority user with the call leg of the second user (Col 7, lines 65 – Col 8, lines 1-12).

Harrison discloses all the particulars of the claim except a switch being a visited mobile switching center; and

identifying a visited mobile switching center that is synchronized with the mobile communication device through employment of a home location register;

However, Vishwanathan does disclose a switch being a visited mobile switching center (Fig. 1) and identifying a visited mobile switching center that is synchronized with

the mobile communication device through employment of a home location register (Fig. 1);

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate Vishwanathan's disclosure to expand the system to a mobile network and provide communication for mobile users.

Regarding claim 18, Harrison discloses The method of claim 15, further comprising the step of:

communicating one or more indications of the barge-in to the mobile communication device (Col 5, lines 48-59).

Regarding claim 19, Harrison discloses the method of claim 15, wherein the preexisting active call comprises a preexisting active call between the mobile communication device and one or more additional communication devices, the method further comprising the step of:

placing one or more of the one or more additional communication devices on hold for a duration of the barge-in (Col 6, lines 36-37; Col 8, lines 9-12).

2. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harrison in view of Perry.

Regarding claim 11, Harrison discloses all the particulars of the claim and even though it is well known in the art that a code can consist of one or more digit patterns, Harrison suggests in Col. 11, lines 51-63 that a (calling party number information which suggests ISUP) but does not explicitly disclose the apparatus of claim 10, wherein the authorization code comprises one or more of:

one or more integrated services digital network user part (ISUP) messages.

However, Perry does disclose the usage of ISUP within a barge-in system (Page 4, [0038]).

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate Perry's disclosure of ISUP to provide access for communication to an intended party.

3. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harrison in view of Bales et al (hereinafter Bales).

Regarding claim 5, Harrison discloses the apparatus of claim 2, wherein the one or more indications comprise an entry indication and an exit indication, wherein the mobile switching component cooperates with the mobile communication device to communicate the entry indication to the second user upon a start of the barge-in (Col 8, lines 1-6).

Even though Harrison discloses all the particulars of the claim, Harrison does not disclose wherein the mobile switching component cooperates with the mobile

communication device to communicate the exit indication to the second user of the mobile communication device upon an end of the barge-in.

However, Bales does disclose sending a notification message to users, informing of the end of call conference. At the start of the barge-in the users were in a conference call state and when a particular terminal is not in the conference state, hence the end of the barge-in, other users are notified (Col 20, lines 48-65).

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate Bales' disclosure to provide better of conference communication state and to keep users informed of the communication status.

### ***Conclusion***

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Buchholz et al. discloses a Method and apparatus for processing barge-in requests;

Hart et al. discloses a Method and apparatus reducing PTT call setup delays with barge-in capability;

Pierce et al.;

Becker et al.;

Chow et al.;

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuck Huynh whose telephone number is 571-272-7866. The examiner can normally be reached on M-F 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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